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#### REMARKS

### Double Patenting

Claims 1, 10 and 13 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4, 10, 11, and 16 of US Patent No. 7,027,651 (Simon et al.). The Applicant respectfully traverses this rejection on the following basis.

With respect to claim 1, Simon et al. fails to teach or suggest "in the texture engine, determining, for each one of said at least one basis, an affine invariant representation of said at least one target primitives". More specifically, Simon et al. does not teach that the step of determining the affine invariant representation of a target primitive is to be done in a texture engine. Simon et al. relates to a particular method of pattern matching for recognition of objects. Claim 1 of the present application is not limited to the particular method of pattern matching claimed in Simon et al. and furthermore, recites a step to be done in a texture engine. There are no teachings or suggestions in Simon et al. that any step of the method of pattern matching is to be done in a texture engine. This makes claim 1 patentably distinct from the claims of Simon et al.

With respect to claim 10, Simon et al. fails to teach or suggest "in said texture engine computing, for said affine invariant representation, a proximity score indicative of the degree of conformance between the identified model primitives and said target primitives". As stated above, Simon et al. does not teach or suggest any step of the claimed method be done in a texture engine. This makes claim 10 patentably distinct from the claims of Simon et al.

With respect to claim 13, Simon et al. fails to teach or suggest "a texture engine, connected to said host processor, for determining, for each one of said at least one basis, an affine invariant representation of said at least one target primitives". As stated above, Simon et al. does not teach or suggest the use of a texture engine to perform any step of the claimed method. This makes claim 13 patentably distinct from the claims of Simon et al.

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Therefore, the Applicant respectfully requests that the double-patenting rejection be withdrawn.

With respect to the rejection of Claims 2-9 on the ground of nonstatutory obviousness-type double patenting with respect to claims 1, 4, 10, 11, and 16 of Simon et al. in view of Denneau (6,384,833), the Applicant hereby submits that claims 1, 10, and 13 have been shown to be patentably distinct from Simon et al. and therefore, all of their dependents are also patentably distinct.

## Claim Rejections - 35 USC § 102

Claims 1, 10 and 13 are rejected under 35 USC 102(b) as being anticipated by the article "Robust Affine Invariant Matching with Application to line Features" by Tsai. The Applicant respectfully traverses this rejection on the following basis.

With respect to claim 1, Tsai fails to teach or suggest "in the texture engine, determining, for each one of said at least one basis, an affine invariant representation of said at least one target primitives". More specifically, Tsai does not state that the step of determining the affine invariant representation of a target primitive is to be done in a texture engine. Tsai describes a technique to perform geometric hashing using lines as the primitive features to compute the geometric invariants. The method itself is disclosed without specifically addressing the computer system into which the method is to be implemented. While parallel realization of computer vision algorithms is mentioned, there are many ways in which computer vision algorithms can be parallelized that do not involve using a texture engine. Hence, the use of the texture engine to perform a step of the method cannot be said to be taught or suggested in the article. Therefore, claim 1 is not anticipated by Tsai.

With respect to claim 10, Tsai fails to teach or suggest "in said texture engine computing, for said affine invariant representation, a proximity score indicative of the degree of conformance between the identified model primitives and said target

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primitives". As stated above, Tsai does not teach or suggest the use of a texture engine to perform any step of the method. Therefore, claim 10 is not anticipated by Tsai.

With respect to claim 13, Tsai fails to teach or suggest "a texture engine, connected to said host processor, for determining, for each one of said at least one basis, an affine invariant representation of said at least one target primitives". As stated above, Tsai does not teach or suggest the use of a texture engine to perform any step of the method. Therefore, claim 13 is not anticipated by Tsai.

Therefore, the Applicant respectfully requests that the anticipation rejection be withdrawn.

Claim Rejections - 35 USC §103

Claims 2-9 are rejected under 35 USC 103(a) as being unpatentable over Tsai in view of Denneau et al. (6,348,833).

For at least the reasons stated above with respect to claims 1, 10, and 13, the Applicant respectfully submits that claims 2-9 are not obvious in view of the cited references.

In view of the foregoing, the Applicant believes the present application to be patentable and early and favorable notice is earnestly solicited.

Respectfully submitted,

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# CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being facsimile transmitted to the United States Patent and Trademark Office on the date shown below.

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